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PUBLICATION 820 OCTOBER 1961

POISON IVY

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CANADA DEPARTMENT OF AGRICULTURE

BEAT POISON IVY

Of all Canadian plants responsible for skin irritation, poison ivy is the most important. It grows in all provinces except Newfoundland, on almost any type of soil.

Although poison ivy generally grows as an upright plant or a trailing vine, it may climb a tree or pole to a considerable height.

The leaves are arranged alternately on a woody stem; each leaf has three leaflets. Although the leaflets vary in size, color, texture and outline, they are always in threes. The fruits are hard and greenish yellow when ripe. They turn white at the end of the year and then gradually darken.

Poison ivy dermatitis is caused by contact with a toxic substance produced by the plant. It is released by crushing, bruising or breaking any part. People differ greatly in susceptibility.

The main precautions are to wear protective clothing if you expect to be near poison ivy, and to wash immediately with soap and water if you have touched poison ivy.

Mild attacks of poisoning may cause no more than shiny, pimple-like spots. Serious cases may result in acute discomfort and upset your health completely.

Your doctor is best qualified to diagnose your rash and prescribe a cure. Products containing calamine are very helpful in treating mild attacks.

Poison ivy may be eradicated with chemical weed killers, or by digging or cultivation where these methods are feasible.

All spraying equipment and hand implements such as digging forks should be thoroughly cleaned after use.

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POISON IVY

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Many persons who have never learned to recognize poison ivy[1] know only too well its distressing effects on the skin. Of all the plants responsible for skin irritation, it is the most important in Canada. Poison sumac,[2] a rarer plant found in southern Ontario and southern Quebec, and the western poison oak,[3] which grows on southern Vancouver Island, are closely related to poison ivy and cause similar skin irritations.

WHERE IT GROWS

Poison ivy grows in all provinces of Canada except Newfoundland, but it is most common in Ontario and western Quebec. From Quebec City eastward, it is more difficult to find. Westward, it is scarce around Lake Superior but is fairly common in the eastern parts of Manitoba. From western Manitoba to the Pacific coast it is troublesome mainly at lake and woodland resorts. It adapts itself to a variety of growing conditions—wet or dry, shaded or sunny—and to almost any type of soil from pure sand or rocky ground to rich woodland loam. It is especially abundant along shores, roadways and railway tracks, and in rocky places. In farm land it is confined chiefly to undisturbed borders.

HOW TO IDENTIFY IT

Poison ivy is the only Canadian plant that has both a three-part leaf and a hard fruit that ranges in color from yellowish green to dull white. It is seldom found as a single plant but grows in patches as a dwarf, shrubby plant from 1 to 3 feet high (Figure 1). Sometimes it grows as a creeping vine and may climb a tree or pole to a considerable height. Because poison ivy varies so much in size and in habit of growth, people sometimes think that some types of it are poison oak. The name *poison oak* correctly applies to a closely related shrubby plant that grows in the southern United States and to the western poison oak, which grows on Vancouver Island and the west coast of the United States.

The almost-smooth, sometimes glossy and firm leaves of poison ivy are arranged alternately on a woody stem. Each leaf has three leaflets; ***this is the only consistent character.*** The center leaflet has a longer stalk than the leaflet on each side. These leaflets vary greatly in shape and lobing. They also vary in size, texture and color. The edges may be entire (smooth) or toothed.

Strawberry, raspberry and some other plants have three-part leaves, but the fruits are not whitish. Three-part leaves are also found on young plants of Manitoba maple, particularly on regrowth, but the more-mature plants usually have five-part leaves. Virginia creeper, which is often confused with climbing poison ivy, has five-part leaves and blue fruit.

Poison ivy leaves and fruits change their appearance with the seasons:

Spring: In the spring the unfolding, crinkly leaves are noticeably reddish. As they develop they gradually become green with a smooth, glossy surface. Often some of the yellowish to brown fruits from the previous year persist below the early leaves.

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[1] *Rhus radicans.*
[2] *Rhus vernix.*
[3] *Rhus diversiloba.*

SUMMER: In early summer, sprays of small, inconspicuous whitish flowers appear in the axils of the leaves on some plants. These flowers are usually followed by clusters of greenish-yellow fruits about the size and hardness of peas. New leaves that continue to develop hide these fruits.

FALL: In the fall the leaves of plants growing on poor, shallow soil turn yellow to brown, and drop. In most locations, however, at least some of the leaves have a pleasing array of colors. Orange, red and scarlet leaves, singly or in clumps, mingle with the browns and yellows. Cool, frosty nights cause them to curl and turn brown. As the leaves drop, the fruit clusters become more noticeable. They have lost their greenish-yellow color and are now white and waxy in appearance.

WINTER: During the winter the fruits shrink somewhat and gradually become yellowish to brownish. The lines deepen, forming segments similar in appearance to those of a peeled orange.

Figure 1.—Poison ivy growing as a dwarf, shrubby plant. It also grows as a creeping vine.

HOW POISONING OCCURS

Poison ivy rash, or dermatitis, is caused by contact with a toxic substance produced by the plant. This substance resembles corn syrup in consistency and color but is oily rather than sticky and is present in the leaves, stems, flowers, fruits and roots. It may be released by crushing, bruising or breaking any part of the plant. The substance does not evaporate and may persist for months on gloves, tools, shoes and picnic outfits. Dogs, cats, and other animals may transmit it. Moreover, droplets of it are probably carried in the smoke from burning poison ivy.

Poisoning occurs most often in early summer when the growth is young, but you may be a victim of it at any season of the year. People differ greatly in susceptibility to poison ivy. You may develop a severe case of dermatitis from the slightest contact with the toxic substance; another person may work in or with poison ivy for years, or even handle the plants, without ill effects. However, sooner or later these apparently immune persons may become susceptible and have to be more cautious.

Some people believe that immunity can be gained by eating a few of the young leaves in the spring. This is not wise as the results can be very serious.

WHAT PRECAUTIONS TO TAKE

If you suspect that you have been in contact with poison ivy, wash immediately with laundry soap and warm water if at all possible. Carefully lather the hands, feet, or any other parts of the body that may have been in contact with the plant. Give particular attention to areas where the oily substance may lodge, such as between the fingers and under rings or wrist watches. Cut the fingernails short. If you take these precautions, and if you are only moderately susceptible, no other treatment should be necessary. Alcohol, kerosene and gasoline are useful substitutes for soap and water.

If you expect to be walking or working among poison ivy plants, a little forethought may save you much time and trouble. Wear clothing that can be washed thoroughly or dry-cleaned before it is worn again. After handling contaminated clothing or tools, wash your hands carefully. A warning to this effect should be given to anyone who is likely to handle such articles. If it is necessary to handle poison ivy, wear gauntlet gloves and keep the arms covered.

When planning to dig out a small patch of poison ivy, or work where it grows, you may reduce the danger of poisoning by spraying the plants with a recommended chemical. Do this at least one week before any attempt is made to remove the plants. This treatment should make the leaves dry up or fall off.

When burning poison ivy stems and roots, keep upwind and cover all exposed skin areas.

HOW THE POISON AFFECTS YOU

The first sign of poisoning is usually a mild itching, followed by a slight blush of the skin. The itching sensation increases and, in some cases, minute watery blisters develop within a few hours. In others it may take several days before they are noted. Sometimes only one blister appears or they may be exceedingly numerous and cover large areas of the body.

In mild cases, these blisters may be no more than shiny, pimple-like spots on the skin. In more serious attacks they eventually burst to become irritating, oozing sores. The sores finally dry up, forming scabs. A severe case—accompanied as it is by acute discomfort, restlessness, and above-normal temperature —may upset your health completely.

HOW TO TREAT THE RASH

If you are sure that you have a mild attack of poison ivy dermatitis there are several remedies you may safely use. Some remedies are effective on certain people and ineffective on others. Furthermore, a remedy may be effective at one time but not at another on the same person. Do not use oily or greasy substances as they are likely to dissolve the toxic substance and spread it.

Among the more effective and widely recommended materials are those that contain calamine. Calamine lotion is especially useful for treating dermatitis of the face and hands. The addition of 1 per cent of phenol to the lotion helps to relieve intense itchiness. Of the many other types of commercial preparations, few are consistently effective in preventing or treating poison ivy dermatitis.

Household remedies such as epsom salts and baking soda give some relief. Make a solution by dissolving either 2 tablespoons of epsom salts or up to 3 tablespoons of baking soda in 1 pint of warm, boiled water. Do not use the baking soda solution on open or oozing sores. Bathe the affected parts of the body in the warm solution at frequent intervals, or use gauze compresses

moistened with it until the rash is healed or until calamine lotion is available. Hold the compresses in place with a covering of oiled silk or wax paper and replace them when they begin to dry.

When in doubt as to treatment, consult a physician as certain other skin troubles are sometimes mistaken for poison ivy dermatitis. He may prescribe oral doses or injections of a poison ivy extract. These may reduce your sensitivity and thus lessen the severity of attacks. Or if large areas of the body are affected with the dermatitis he may administer special hormones. Your doctor is best qualified to diagnose your rash and prescribe a cure.

HOW TO GET RID OF THE PLANTS

Poison ivy can be eradicated with either chemicals or implements. The method you choose will depend on the size of the area infested, its location, and the equipment and time at your disposal. A wise choice of method, and persistence in using it, will eventually rid your property of the pest.

When you find poison ivy plants, mark them with a suitable warning or fence them off until they are eradicated.

Since each new crop of leaves must be killed to prevent the plant from replenishing its food reserves in the roots, these three steps are important: (1) apply the treatment you consider most suitable, (2) inspect the treated area regularly for several months and (3) repeat the treatment whenever new growth is found.

Using Chemicals

Chemicals are recommended for killing poison ivy covering large areas and in other places where it is not practical to remove the plants with hand implements. Some of the chemicals may damage grass but it usually recovers.

Applying the Chemical

For small areas, use a 2- or 3-gallon knapsack sprayer; for large areas a sprayer mounted on a tractor or truck is better. If you do not wish to do the work yourself, ask your provincial extension service to recommend contract spray operators who have the equipment and experience to do it. At all times keep the spray off the leaves, stems and trunks of desirable trees or shrubs. To reduce the chances of damage to gardens, etc., by spray drift, lower the pressure in the tank and use a coarser nozzle.

When and How to Spray

Rubber boots, coveralls and gauntlets are strongly recommended for anyone who plans to eradicate poison ivy or work where it grows.

Make the first application when the foliage is well developed—usually in June. If possible, spray on a calm day or when the wind is blowing away from the plants you wish to protect. Do not spray when the leaves are wet from dew or rain or when rain threatens.

A thorough job of spraying is essential; every leaf must be covered with the chemical. When the growth is very thick you may have to spray again within a few days. The second spraying is very important as new growth or plants missed the first time will reinfest the area. Spray whenever new growth appears, but not later than mid-August.

Further treatments are usually needed during the next year to kill all plants.

How Much Spray to Use

One gallon of solution will cover from 100 to 200 square feet, depending on the density of the poison ivy and the type of chemical used. All leaves must be covered with the solution.

Chemicals to Use

The most important chemicals available for killing poison ivy are listed below. When used as directed, they do a satisfactory job.

Some of the products are corrosive and all, even in minute amounts, can damage desirable plants. Therefore, be sure to clean spraying equipment thoroughly after using it. See page 8.

Brush killer.—There are many products available under this name. All are liquids and contain the chemicals 2,4-D and 2,4,5-T in various concentrations. Those with low-volatile ingredients are much safer to use. If the label has no specific directions for use against poison ivy, follow the instructions for controlling woody growth or brush. Apply about 2 pounds of the active ingredients per acre. These chemicals are nonpoisonous, noncorrosive and nonflammable when used as directed.

Silvex.—Silvex is the name of the chief chemical or active ingredient in several products. None are sold under the name silvex. To obtain this chemical, ask your dealer for a product containing it. Silvex is slightly more effective than the brush killers but costs more and is not as readily available. Apply about 2½ pounds of the active ingredient per acre. This liquid material is nonpoisonous, noncorrosive and nonflammable when used as directed.

Amitrole.—Amitrole is the common name for the chemical amino triazole, which is the active ingredient in several products. To obtain this chemical, ask your dealer for a product containing amino triazole. It also is slightly more effective than the brush killers but costs more and is not as readily available. Apply about 2½ pounds of the active ingredient per acre. It is available as a wettable powder that dissolves in water, or as a liquid. When used as directed it is nonpoisonous, noncorrosive and nonflammable.

Ammate.—Use this product at the rate of 1 pound of the powder dissolved in each gallon of water for each 100 square feet of foliage. It contains no poisonous ingredients, but prolonged contact with it may injure the skin. As the chemical is somewhat corrosive, wash and rinse all equipment thoroughly, including the rubber boots worn by the operator, as soon as the spraying is finished. This weed killer is nonflammable and nonexplosive.

2,4-D.—Several forms of this chemical are available, but for poison ivy the liquid amines or low-volatile esters are preferable. Apply about 2 pounds of the active ingredient per acre. They are nonpoisonous, noncorrosive and nonflammable when used as directed. If the label does not specify poison ivy, follow the instructions for controlling woody growth or brush.

NOTE: Where loss of grass or trees does not matter, the following materials may be used.

Mixtures of borate and sodium chlorate, with or without monuron.—Products containing these chemicals are used at the rate of 2½ pounds per 100 square feet of area to be treated. They are not selective; in other words, they may kill other plants besides poison ivy. Under some conditions they kill trees if the roots extend under the treated area and they can also prevent all growth for a year or even longer.

Although these products are considered to be nonpoisonous when used as directed, keep all livestock out of the sprayed area until rain has fallen or the poison ivy leaves have dropped.

Sodium chlorate.—Sodium chlorate is available as a pure chemical or in combination with other ingredients that reduce the fire hazard. Thoroughly rinse all equipment with water as soon as you finish spraying. Although sodium chlorate is poisonous to livestock, the amount that animals may consume from browsing treated areas is not likely to be harmful. It is advisable, however, to keep livestock away from sprayed areas until rain has fallen.

If you use the pure chemical, dissolve 1 pound in 1 gallon of water for each 200 square feet. The chief danger of the pure chemical is the hazard of fire. When dried on vegetation, wood, or clothing, sodium chlorate is highly flammable until it has been removed either by rain or by washing.

If you use a sodium chlorate product that contains a fire retardant, apply from 1½ to 2 pounds per gallon of water for each 100 square feet.

Using Implements

For isolated plants in stone-free soil and for small patches of poison ivy, use a grub hoe or a spade to remove the top growth and roots. This method is used in places where chemicals might damage desirable plants. If you are highly susceptible to poison ivy, do not try to pull or dig it out yourself—have someone less sensitive do it for you. In large areas, such as gardens and cottage lots, if there are no trees or stones, poison ivy can be killed quickly and cheaply by the usual methods of cultivation.

Cleaning the Equipment

As it is very difficult to thoroughly remove some weed killers from the spraying equipment, use another sprayer, if possible, for applying insecticides or fungicides to vegetables, fruits and ornamentals. This applies particularly to the ester forms of 2,4-D and 2,4,5-T and to silvex. Furthermore, do not store equipment contaminated with these chemicals, or the weed killers themselves, in or near greenhouses, susceptible crops, or where seed, fertilizer or other pesticides are stored.

All traces of amitrole, ammate, borate–sodium chlorate mixtures and sodium chlorate may be removed from equipment fairly easily. Make up a strong (preferably hot) solution of a detergent or alkaline cleaner. Run some of it through the sprayer and leave the balance in overnight. Next day drain, rinse and flush all parts of the sprayer both inside and out.

To remove traces of 2,4-D, 2,4,5-T and silvex, use a mixture of 5 parts of fuel or diesel oil to 95 parts of water containing a detergent and follow the same procedure.

As mentioned before, clothing such as coveralls, gauntlets and rubber boots and other equipment such as pails, spades and grub hoes, should be thoroughly cleaned to remove traces of the chemical and any of the toxic substance. See "What Precautions to Take", page 5.

HELP TO ERADICATE POISON IVY

Learn to recognize it.

Rid your own property of it.

Co-operate with your neighbors
in campaigning against it.

Originally published as Publication 564 ..... April, 1937
Revised as Publication 820 ..... July, 1949
Revised ..... October, 1961

Copies of this publication may be obtained from:

INFORMATION DIVISION
CANADA DEPARTMENT OF AGRICULTURE
OTTAWA, ONTARIO

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1961

Cat. No. A43-820

25M—28246—10:61